[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2014-0770; Directorate Identifier 2014-CE-024-AD; Amendment

39-18064; AD 2015-01-03]

RIN 2120-AA64

Airworthiness Directives; PILATUS Aircraft Ltd. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final Rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for PILATUS Aircraft Ltd. Model PC-7 airplanes. This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as possible cracking from stress corrosion on various parts of the airplane structure made of aluminum alloy AA2024-T351. We are issuing this AD to require actions to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in the AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2014-0770; or in person at Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.

For service information identified in this AD, contact PILATUS AIRCRAFT LTD., Customer Technical Support (MCC), P.O. Box 992, CH-6371 Stans, Switzerland; phone: +41 (0)41 619 67 74; fax: +41 (0)41 619 67 73; email: Techsupport@pilatus-aircraft.com; internet: http://www.pilatus-aircraft.com. You may review this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

FOR FURTHER INFORMATION CONTACT: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to add an AD that would apply to PILATUS Aircraft Ltd. Model PC-7 airplanes. The NPRM was published in the *Federal Register* on October 7, 2014 (79 FR 60389). The NPRM proposed to correct an unsafe condition for the specified products and was based on mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country. Since the NPRM was issued, the MCAI was revised based on revised service information. The NPRM we issued already referenced the revised service information. The revised MCAI states:

This Airworthiness Directive (AD) is prompted due to the possibility of cracks in some critical parts. It is possible that stress corrosion cracks may occur on various parts of the aircraft structure initially made of aluminium alloy AA2024-T351 which is susceptible to Stress Corrosion Cracking (SCC). Later in production, the material specification was changed to aluminium alloy AA2124-T851 to decrease the risk of stress corrosion. The Part Number (P/N) of the affected structural parts are not always changed when the new material was introduced.

Such a condition, if left uncorrected, could lead to failure of critical parts on the aircraft structure and will prejudice the structural integrity of the aircraft.

To address this potential unsafe condition Pilatus Aircraft Ltd. issued PILATUS PC-7 Service Bulletin (SB) No. 51-001 and FOCA Switzerland issued AD HB-2014-001 to require a one-time check to identify the material specification and inspect the affected areas of the airframe that are made of aluminium alloy AA2024-T351. Any structural parts of the aircraft structure found to be cracked must be reported to Pilatus prior to further flight.

In the meantime Pilatus Aircraft Ltd. issued PILATUS PC-7 SB No. 51-001 Revision 1 to correct paragraphs (§) 1.C.(3) and § 1.D. to update Part Number (P/N) references of the AA2024-T351 material and to add a clarification that an inspection can be carried out if an elevator center control-rod P/N 116.35.07.345 is installed. It also clarifies which center tank support bracket is covered by SB 51-001.

For the reasons described above, this AD retains the requirements of FOCA Switzerland AD HB-2014-001, which is revised and clarifies that an inspection of the elevator center control-rod can be carried out if P/N 116.35.07.345 is installed and corrects some paragraphs and clarifies the information which center tank support bracket is affected.

The MCAI also requires replacement of the elevator center control-rod, P/N 116.35.07.271 or 116.35.07.345; and shackle, P/N 116.35.07.183. The MCAI can be found in the AD docket on the Internet at:

http://www.regulations.gov/#!docketBrowser;rpp=25;po=0;dct=PR%252BSR;D=FAA-2014-0770.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comment received on the proposal and the FAA's response to the comment.

Request Revision of Paragraph (f)(3)

Tom Langen of Pilatus commented that the NPRM (79 FR 60389, October 7, 2014) referred to MCAI AD HB-2014-001, dated July 25, 2014. Since issuance of the NPRM, the MCAI was revised to AD HB-2014-001R1, dated October 22, 2014. The revised MCAI clarified P/N 116.35.07.271 needed to be replaced where the other P/N 116.35.07.345 should be inspected and not automatically replaced. Tom Langen requested we revise paragraph (f)(3) of the AD to read like the revised MCAI.

We agree. We revised this AD as requested.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting the AD with the change described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM (79 FR 60389, October 7, 2014) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (79 FR 60389, October 7, 2014).

We also determined that these changes will not increase the economic burden on any operator or increase the scope of the AD.

Relevant Service Information

PILATUS Aircraft Ltd. has issued PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI. The service bulletin describes procedures for inspecting for stress corrosion and replacing various parts of the airplane structure made of aluminum alloy AA2024-T351. You can find this service information on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2014-0770.

Costs of Compliance

We estimate that this AD will affect 10 products of U.S. registry. We also estimate that it would take about 30 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts would cost about \$4,700 per product.

Based on these figures, we estimate the cost of the AD on U.S. operators to be \$72,500, or \$7,250 per product.

In addition, we estimate that any necessary follow-on actions would take about 14 work-hours and require parts costing \$10,000, for a cost of \$11,190 per product. We have no way of determining the number of products that may need these actions.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
 - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2014-0770; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

The FAA amends § 39.13 by adding the following new AD:
 PILATUS Aircraft Ltd: Amendment 39-18064; Docket No. FAA-2014-0770; Directorate Identifier 2014-CE-024-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to PILATUS Aircraft Ltd. Model PC-7 airplanes, manufacturer serial numbers (MSN) 101 through MSN 618, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 51: Standard Practices/Structures.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as possible cracking from stress corrosion on various parts of the airplane structure made of aluminum alloy AA2024-T351. We are issuing this AD to detect and correct stress

corrosion cracks that may occur on various parts of the airplane structure initially made of aluminum alloy AA2024-T351, which is susceptible to stress corrosion cracking (SCC). Such a condition, if left uncorrected, could lead to failure of critical parts on the airplane structure and weaken the structural integrity of the airplane.

(f) Actions and Compliance

Unless already done, within the next 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), perform a one-time conductivity test of items 6 through 9 and 11 through 13 as listed in paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014, to check the material of the parts—determine whether they are made of aluminum alloy AA2124-T851 or aluminum alloy AA2024-T351. Do not install any item unless it has been inspected following the applicable paragraph of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014.

- (1) For airplanes with any parts made of aluminum alloy AA2124-T851: Within 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), make an entry in the airplane logbook as required by paragraph 3.D.(3) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014. The only other actions of this AD that apply to airplanes with all parts made of aluminum alloy AA2124-T851 are the actions in paragraphs (f)(3), (f)(4), and (f)(5) of this AD.
- (2) For airplanes with any parts made of aluminum alloy AA2024-T351: Within 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do the actions in paragraphs (f)(2)(i) through (f)(2)(iii) as applicable, including all subparagraphs:

- (i) For items 7 through 9 and 11 through 13 as listed in paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014, within 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do a one-time inspection for cracks. If any cracks are found as a result of the inspection, before further flight, you must contact PILATUS Aircraft Ltd. to obtain FAA-approved repair instructions approved specifically for compliance with this AD and incorporate those instructions. Use the contact information found in paragraph (h) of this AD.
- (ii) For item 6 as listed in paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014, within 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), replace with a part made of aluminum alloy AA2124-T851.
- (iii) For Items 1, 2, 4, 5, and 10 as listed in paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014, within 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do the following actions in paragraphs (f)(2)(iii)(A) and (f)(2)(iii)(B), as applicable.
- (A) For items 1, 2, 4, and 10 as listed in paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014, do a one-time inspection for cracks. If any cracks are found, before further flight, you must contact PILATUS Aircraft Ltd. to obtain FAA-approved repair instructions approved specifically for compliance with this AD and incorporate those instructions. Use the contact information found in paragraph (i)(3) of this AD.
- (B) For item 5 as listed in paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014, replace with a part made of aluminum alloy AA2124-T851.

- (3) <u>For all airplanes</u>: For item 3 as listed in paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014, within 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), replace elevator center controlrods with P/N 116.35.07.271 (item 3 as listed in paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014), because the inspection for cracks on this type of control-rods is difficult. If elevator center controlrods P/N 116.35.07.345 (Item 3 as listed in paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014), are installed, these type of control rods will be inspected.
- (4) For all airplanes: As of 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do not install the parts listed in items 1 and 2, 4, and 7 through 13 of paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014, that are made of aluminum alloy AA2024-T351 unless they have been inspected and found free of cracks.
- (5) For all airplanes: As of 12 months after [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] (the effective date of this AD), do not install the parts listed in items 3, 5, and 6 of paragraph 1.A.(2) of PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014, that are made of aluminum alloy AA2024-T351.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas

City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

- (2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.
- (3) **Reporting Requirements:** For any reporting requirement in this AD, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(h) Related Information

Refer to MCAI Federal Office of Civil Aviation (FOCA) AD HB-2014-001, dated July 25, 2014; and AD HB-2014-001R1, dated November 5, 2014 for related information. The MCAI can be found in the AD docket on the Internet at: http://www.regulations.gov/#!docketBrowser;rpp=25;po=0;dct=PR%252BSR;D=FAA-2014-0770.

(i) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (i) PILATUS Aircraft Ltd. PILATUS PC-7 Service Bulletin No: 51-001, Revision No. 1, dated August 26, 2014.
 - (ii) Reserved.
- (3) For PILATUS Aircraft Ltd. service information identified in this AD, contact PILATUS AIRCRAFT LTD., Customer Technical Support (MCC), P.O. Box 992, CH-6371 Stans, Switzerland; phone: +41 (0)41 619 67 74; fax: +41 (0)41 619 67 73; email: Techsupport@pilatus-aircraft.com; internet: http://www.pilatus-aircraft.com.
- (4) You may view this service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.
- (5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

 Issued in Kansas City, Missouri, on December 31, 2014.

Robert Busto, Acting Manager, Small Airplane Directorate, Aircraft Certification Service. [FR Doc. 2015-00010 Filed 01/23/2015 at 8:45 am; Publication Date: 01/26/2015]